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THE INFLUENCE OF REST IN LOCOMOTOR ATAXIA.

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Many years ago I attended a gentleman who had locomotor ataxia which came on with a terrible suddenness in the form of a neuralgia of the lower limbs. It arose, as he believed, from having bathed in the sea when chilled. The first attack was described as agonizing. It lasted two days only, and was followed, after a few weeks, by a second. Thenceforward they grew frequent, and at length no day passed without some hours of such torment as I have never seen equalled in ataxic neuralgia. The ataxic symptoms were more slowly developed, and did not at any time extend to the upper limbs. Ten years after the first attack of pain, he fell when getting out of a street car, and ruptured the internal lateral ligaments of the right knee. Owing to this accident he was forced to remain in bed three months. During this period the pain became less severe and less frequent, until it finally ceased. When he got about again the pain did not return, and during several years there was no renewal of it, nor, as I have since learned, did it ever again annoy him. It was also remarked that the ataxic symptoms, which hitherto had advanced slowly, progressed no further, and remained unaltered until his death, several years after, from acute disease of the lungs. I regarded this case for a time as a curious medical incident, and though presuming that the check in its progress might have been such an one as we often see in this disorder, I nevertheless kept it in mind.

Five years ago, a patient æt. 47, who had well-developed ataxial troubles with continuance throughout of the neuralgia, broke his leg. The long enforced rest which followed entirely stopped the pain, which has never come back. The ataxial symptoms have increased but very slowly; I am not confident that their rate of advance was altered, but I am certain the pain was quite abruptly ended.

The third example did not occur in the person of one of my own patients, but all the facts are well known to me. In this case the patient broke his thigh, and, soon after getting about, broke his leg. The prolonged rest thus necessitated terminated the neuralgia, previously severe, and seems up to this date (four years later) to have arrested the march of the disease, said to have been before that quite rapid.

A fourth instance was related to me recently. Here also the left leg was broken, and the neuralgia ceasing did not recur, although, as to the ataxial symptoms, I can learn nothing.

There is now in the infirmary for nervous disease attached to the Orthopædic Hospital in Philadelphia, a woman, æt. 48, who has ataxia with frequent, almost daily, spells of very painful neuralgia. A few weeks ago she broke her left thigh and, being at once put to bed, has had since then but a single attack of pain.

In one of the male wards of the same hospital is a bad and very painful case of ataxia in the early stage. To test the correctness of my belief as to the value of absolute rest in relieving ataxial neuralgia, I have kept him several weeks in bed, no medicine having been given until very lately. The result as to control of the pain has most surely been very remarkable. Before going to bed he could not walk without aid, nor could he stand for even a moment with closed eyes. The pain was inconstant, but never left him two days without extreme torment. Six weeks of almost absolute rest enable him to stand a few moments with shut eyes, to walk unaided up and down the room, and to assure me of his entire freedom from pain since the seventh day in bed.

I do not think these cases can be looked upon as mere coincidences of pain ceasing about the time of the injury; I should rather conclude that exercise has power to flush the ganglia used in movement just as thinking brings blood to the brain and raises its temperature, and that this afflux of blood, or at all events the mere functional activity, is in some way injurious and irritating to the diseased centres. This will seem at least a reasonable view if we recall the influence of motion upon certain facial neuralgias. Even where there is no tender point, talking or chewing will often cause increase of pain, or awaken pain afresh. Thus I have lately seen a case of frightful torment in the upper jaw, which was due to acid dyspepsia, and was cured when this state was relieved. The stomachal condition had created, however, a state of the nerve centres of the fifth nerve of such a character that if the patient attempted to talk or laugh it presently resulted in a severe fit of pain, nor is this a very rare or merely curious example. Considering the spinal posterior ganglia and columns as in ataxia ready to pass into the state which gives rise to pain, it seems likely enough that exercise may be efficient in bringing it on. Exercise does not only mean motion in a physiological view of its totality of results, but it also involves the passage centripetally of a host of impressions generated in the moving tissues, and of necessity passing through the central sensory ganglia, and their related parts. The centres of motion and of sensation are, therefore, active during movement, and are then alike excited, so that we may with these facts in view see why motion may excite sensory organs.

It seems, then, that in the painful stage of locomotor ataxia motion is probably injurious, and that rest in bed is for like reasons useful. Time

alone with future experience can be relied upon to determine how general may be the value of some such mode of treatment of ataxia and ataxial pain, and how permanent may prove to be the result. I am perfectly well assured in my own belief that rest will prove to be the best treatment for the early stages of ataxia, but if I were even less secure in my opinion I should not hesitate to speak of it as a possible mode of relief, since so little of value has been offered in the way of cure, or even of partial relief, in this long and distressing malady.

It naturally occurs to ask why so many ataxics have chanced to break limbs, and as to this I should answer first that no people are so awkward or fall so much, and next, that in some of the cases, it seemed to me that the habitual abruptness of the muscular acts had a share in the calamity, and that I have suspected, what has not yet been proved, that the bones in ataxics may suffer some impairment of their nutrition, and hence of their strength. Such was the case in Dr. Pennock's case, reported by Dr. C. Morris, where the lesion was sclerosis of the antero-lateral columns of the cord. But this is as yet purely speculative, however full of interest, and what I want to set forward prominently is that I have seen rest cure the neuralgia of posterior spinal sclerosis, and apparently in some cases arrest the disease.